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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,923	02/14/2002	Hiroaki Mukai	219465US2	4790

22850 7590 02/22/2006

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/073,923	Applicant(s) MUKAI ET AL.	
	Examiner Bob A. Phunkulh	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 7-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>See attachment</u> . | 6) <input type="checkbox"/> Other: _____ |

6/21/04;
2/09/04;
7/15/03;
2/14/02

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsunaga et al. (US 6,434,164), hereinafter Matsunaga.

Regarding claims 1 and 2, Matsunaga discloses a dynamic bandwidth updating method for a communications system in which a plurality of subscriber apparatuses (stations 30-32, see figure 1) and a station apparatus (center station 10, figure 1) are connected to the same transmission channel for bidirectional communication (link 20, see figure 1), for dynamically updating a bandwidth allocated in a direction of upstream transmission from the subscriber apparatuses to the station apparatus, comprising the steps of:

calculating a bandwidth usage rate from a bandwidth allocated in a bandwidth updating period and a bandwidth actually used in the bandwidth updating period (calculating upstream rate step 712, see figure 5); and

determining a bandwidth to be allocated in a subsequent bandwidth updating period based on the bandwidth usage rate (bandwidth assigned after updating, see step

Art Unit: 2661

714, figure 5).

Regarding claims 3 and 4, Matsunaga discloses the allocation of bandwidth involves ensuring that a minimum guaranteed bandwidth guaranteeing a minimum level of communication is allocated to the subscriber apparatus, and determining a surplus bandwidth which is a result of subtraction of the minimum guaranteed bandwidth from an allocated bandwidth (see col. 2 lines 7-22).

Regarding claims 5 and 6, Matsunaga discloses calculating in the subscriber apparatus a requested surplus bandwidth requested of the station apparatus (col. 3 lines 14-27); and determining in the station apparatus the surplus bandwidth based on the requested surplus bandwidth, so as to determine the bandwidth to be allocated (col. 2 line 60 to col. 3 line 13).

Regarding claims 17 and 18, Matsunaga discloses a bandwidth allocated to the subscriber apparatus does not exceed a maximum bandwidth set up for the subscriber apparatus (see col. 2 lines 60 to col. 3 line 13).

Regarding claims 19 and 20, Matsunaga discloses a dynamic bandwidth updating apparatus for a communications system in which a plurality of subscriber apparatuses (subscriber stations 30-32, see figure 1) and a station apparatus (center station 10, see figure 1) are connected to the same transmission channel for

Art Unit: 2661

bidirectional communication, for dynamically updating a bandwidth allocated in a direction of upstream transmission from the subscriber apparatuses to the station apparatus, wherein a bandwidth usage rate is calculated from a bandwidth allocated in a bandwidth updating period and a bandwidth actually used in the bandwidth updating period (calculating upstream rate step 712, see figure 5), and a bandwidth to be allocated in a subsequent bandwidth updating period is determined based on the bandwidth usage rate (bandwidth assigned after updating, see step 714, figure 5).

Allowable Subject Matter

Claims 7-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

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(703) 872-9306, (for formal communications intended for entry)

Or:

Art Unit: 2661

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

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220 20th Street South
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

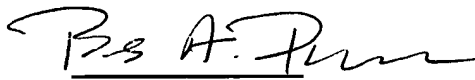
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Wellington Chin**, can be reach on **(571) 272-3134**. The fax phone number for this group is **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/073,923

Page 6

Art Unit: 2661

A handwritten signature in black ink, appearing to read "Bob A. Phunkulh". The signature is fluid and cursive, with a long horizontal stroke at the end.

Bob A. Phunkulh
Primary Examiner
TC 2600

BOB PHUNKULH
PRIMARY EXAMINER

Technology Division 2616
February 17, 2006